Abstract

[0136]   A video distribution system is implemented on a hierarchical parallel processing system that has clusters that are automatically formed from nodes of computer processing systems. Each cluster has a cluster supervising processor or group leader system that controls cluster configuration, fault detection and isolation, and data distribution. The group leader is determined according to a priority determined during the configuring of the hierarchical parallel processing system. The clusters are able to be reconfigured to allow removal and addition of nodes without impact on operation of the parallel processor system. The cluster provide a node status or heartbeat message that which provides detection and isolation of failure of nodes and disk storage devices within a cluster. The nodes within the cluster are able to join or leave a cluster and not affect performance.